



Agenda Item 4: b) Review and monitoring of the Contingency Plans for Volcanic Ash and Release of Radioactive Material

Review and update of the Contingency Plan for Volcanic Ash and Release of Radioactive Material

(Presented by the Secretariat)

SUMMARY	
This working paper is a follow-up to the implementation of the contingency plans for volcanic ash and release of radioactive material.	
References:	
<ul style="list-style-type: none">• First MET Coordination Meeting of the SAM Region• MET meetings prior to 2021	
ICAO strategic objectives:	<i>A - Safety</i> <i>B - Air navigation capacity and efficiency</i> <i>E - Environmental protection</i>

1. Introduction

1.1 The GREPECAS procedures and recommendations, as well as the meetings of Directors of Civil Aviation, have recommended the establishment of a Volcanic Ash Contingency Plan.

1.2 The First MET Coordination Meeting recommended and followed up on the implementation of a volcanic ash contingency plan.

1.3 Successive MET meetings have recommended the development of a Contingency Plan for the Release of Radioactive Material.

2. Discussion

2.1 Volcanic eruptions, the presence of volcanic ash clouds, as well as the release of radioactive material are a safety concern and require clear procedures and contingency plans to mitigate their effects.

2.2 The drafting and dissemination of contingency plans for the cases mentioned in the previous paragraph, as well as the testing of such plans in a drill, would prepare the technical personnel involved in air navigation services for a better reaction in the event of a real case.

2.3 The First MET Coordination Meeting followed up on the implementation of volcanic ash contingency plans. The information examined at that meeting can be found in Appendix A.

2.4 Regarding the implementation of VONAs, there are currently four States that have established such agreements: Argentina, Chile, Ecuador and Peru. States are requested to provide information to complete the table contained in Appendix B.

2.5 Regarding contingency plans for the release of radioactive material, at the MET Coordination Meeting, the States noted that there were procedures for the management of radioactive material, regulated at the international level, which were unknown to the civil aviation authority and to air navigation service providers, and with which it was necessary to become familiar before drafting a contingency plan. The States also noted that some of them had already approached their State atomic energy agencies to plan the drafting of the contingency plan.

2.6 The Meeting must consider that, since 2014, air navigation meteorological service providers are encouraged to liaise with ATS units on the issue of the release of radioactive material, as these units would receive information from the Regional Specialised Meteorological Centre (RSMC) on the release of radioactive material.

2.7 The Secretariat has prepared the table contained in Appendix C to follow up on the drafting of contingency plans for the release of radioactive material. States are asked to complete the information requested in the table.

3. **Suggested action**

3.1 The Meeting is invited to:

- a) take note of the information provided in this working paper;
- b) review and update the information contained in Appendices A, B and C;
- c) agree on any other action it may deem appropriate.

APPENDIX A

Volcanic Ash Contingency Plans – SAM Region				
STATE	Areas involved	Validity date	Action taken for updating	National Volcano Observatory
Argentina	ANAC Airport administrator EANA PFA (SEI) Airport operator PSA Medical service Buenos Aires VAAC MWOs/AMOs (5) AMOs only (4) International AMS Volcano observatory (SEGEMAR) VONA implemented Obs: SEGEMAR Agreement with NWS only. ANAC-SEGEMAR-EANA-NWS agreement in process		Updated 19-05-2021 Additional comments: a) Volcanic ash control plan ANAC Resolution IF-2021-13698153-APN-DGISA#ANAC Resolution 2021-148-APN-ANAC#MTR	
Bolivia	Plan already implemented and disseminated	Version 1.0. (first edition) October 2018	In process of amendment	
Brazil				
Chile	Chile renewed the agreement with the Volcano Observatory			
Colombia	Has a plan and VONA	In the process of updating the national protocol. The Air Force, State aviation involved	March 2022	

Ecuador	Agreement between DGCA – Geophysical Institute	Automatically renewed every 5 years since September 2014	It stands	
Guyana				
French Guiana				
Panama	Contingency plan (not yet approved); no VONA			
Paraguay	Was updated			
Peru	CORPAC: Area control centre (ACC), meteorological watch office (MWO). IGP: National vulcanological centre – CENVUL	Date of entry into force: 15 October 2020. To be reviewed every 3 years	Date of entry into force: 15 October 2020. To be reviewed every 3 years	
Suriname	The plan is to be evaluated and then updated.			
Uruguay	Ash contingency plan			
Venezuela	<p>1.- The CAA notified the METP (SERMETAVIA) of the commitment made in the SAM/RCM regarding the development of a Volcanic Ash Contingency Plan, as part of the functions of the MWO, in accordance with the provisions set out in RAV277.- Chapter C. Section 277.13.</p> <p>2. The METP (SERMETAVIA) will coordinate the drafting of said plan with the air navigation service (ANS)</p> <p>3. The CAA will supervise and oversee the implementation and enforcement of the Plan</p>	Following drafting by METP (SERMETAVIA) and approval by CAA/ANS	Monitoring and verification of data on volcanic ash occurrences in adjacent FIRs	

APPENDIX B

VONA Implementation – SAM Region				
STATE	Cooperation Agreement Signed	Validity Date	Actions to Update	National Volcanic Observatory
Argentina				
Bolivia				
Brazil				
Chile				
Colombia				
Ecuador				
Guyana				
French Guyana				
Panama				
Paraguay				
Peru				
Suriname				
Uruguay				
Venezuela				

APPENDIX C

Implementation of Contingency Plans for the Release of Radioactive Material – SAM Region					
Estado /State	Implantado / Implemented	Situación actual del Proceso / Current Status	Áreas Involucradas / Areas Involved	National authority responsible for radioactive material	Contact with national authority responsible for radioactive material
Argentina	Implemented	Partially implemented - EANA is not yet included in the Plan. Under discussion			
Bolivia	Not implemented	Under development	ATS/MET		
Brazil					
Chile	Implemented				
Colombia	NO	Holding meetings with the Ministry of Energy in order to articulate the warnings of the global system.	ATC IDEAM MET and AIM		
Ecuador	Not implemented	In discussions with the Under-Secretariat for Nuclear Control and Applications (SCAN) of the Ministry of Energy and Non-Renewable Natural Resources (MERNNR)	DGAC / MERNNR		
Guyana					
French Guiana					
Panama					

Paraguay					
Peru	<p>Pending implementation. Initial contact with the Peruvian Nuclear Energy Institute (IPEN), the national authority that oversees compliance with standards for the safe operation of nuclear and radioactive facilities. Contingency plan to be implemented in 2022. CORPAC: Area Control Centre (ACC) and Meteorological Watch Office (MWO) in the Lima FIR. IPEN: Radiation Safety Sub-Directorate.</p>	<p>Pending implementation. Initial contact with the Peruvian Nuclear Energy Institute (IPEN), the national authority that oversees compliance with standards for the safe operation of nuclear and radioactive facilities. Contingency plan to be implemented in 2022. CORPAC: Area Control Centre (ACC) and Meteorological Watch Office (MWO) in the Lima FIR. IPEN: Radiation Safety Sub-Directorate.</p>	<p>Pending implementation. Initial contact with the Peruvian Nuclear Energy Institute (IPEN), the national authority that oversees compliance with standards for the safe operation of nuclear and radioactive facilities. Contingency plan to be implemented in 2022. CORPAC: Area Control Centre (ACC) and Meteorological Watch Office (MWO) in the Lima FIR. IPEN: Radiation Safety Sub-Directorate.</p>		
Suriname					
Uruguay					
Venezuela	<p>In process of implementation</p>	<p>Under study and implementation by METP (SERMETAVIA).</p>	<p>1.- The CAA notified the METP (SERMETAVIA) of the commitment acquired in the SAM/RCM regarding the drafting of a Contingency Plan for the Release of Radioactive Material, as part of the functions of</p>		

			<p>the MWO, in accordance with the provisions set forth in RAV277.- Chapter C. Section 277.12. Paragraph (b). Subparagraph (9).</p> <p>2. The METP (SERMETAVIA) will coordinate the drafting of said plan with the air navigation service (ANS)</p> <p>3. The CAA will supervise and oversee the implementation and enforcement of the Plan.</p>		
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